

(12) **UK Patent Application** (19) **GB** (11) **2 213 072 A** (13)
 (43) Date of A publication 09.08.1989

(21) Application No 8728643.1

(22) Date of filing 08.12.1987

(71) Applicants

James Peter de Witt
 21 Greenwich Church Street, London, SE10,
 United Kingdom

Jane Patricia de Witt
 21 Greenwich Church Street, London, SE10,
 United Kingdom

(72) Inventors

James Peter de Witt
Jane Patricia de Witt

(74) Agent and/or Address for Service

Graham Jones & Company
 77 Beaconsfield Road, Blackheath, London, SE3 7LG,
 United Kingdom

(51) INT CL^{*}
A63H 15/00

(52) UK CL (Edition J)
A6S S19B4X S22BX S22X

(56) Documents cited
GB 0693610 A GB 0625862 A GB 0596891 A
US 4575353 A US 3699704 A US 3564759 A

(58) Field of Search
UK CL (Edition J) A6S
INT CL^{*} A63H

(54) **Toy apparatus**

(57) Toy apparatus (2) comprises at least one object, e.g. figure (4), a first pivot arrangement (6) about which the figure (4) pivots during operation, a second pivot arrangement (8) about which the figure (4) and the first pivot arrangement (6) pivot during operation, a stand (10), and counterweight means (12) the toy figure (4) and the counterweight means (12) being so balanced that a push causes the toy apparatus (2) to operate under gravity such that there is prolonged movement of the toy figure (4) and the first pivot arrangement (6) about the second pivot arrangement (8), and prolonged movement of the toy figure (4) about the first pivot arrangement (6).

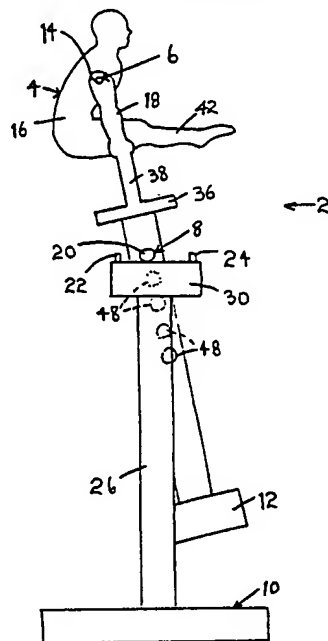


FIG 1

1/2

22130

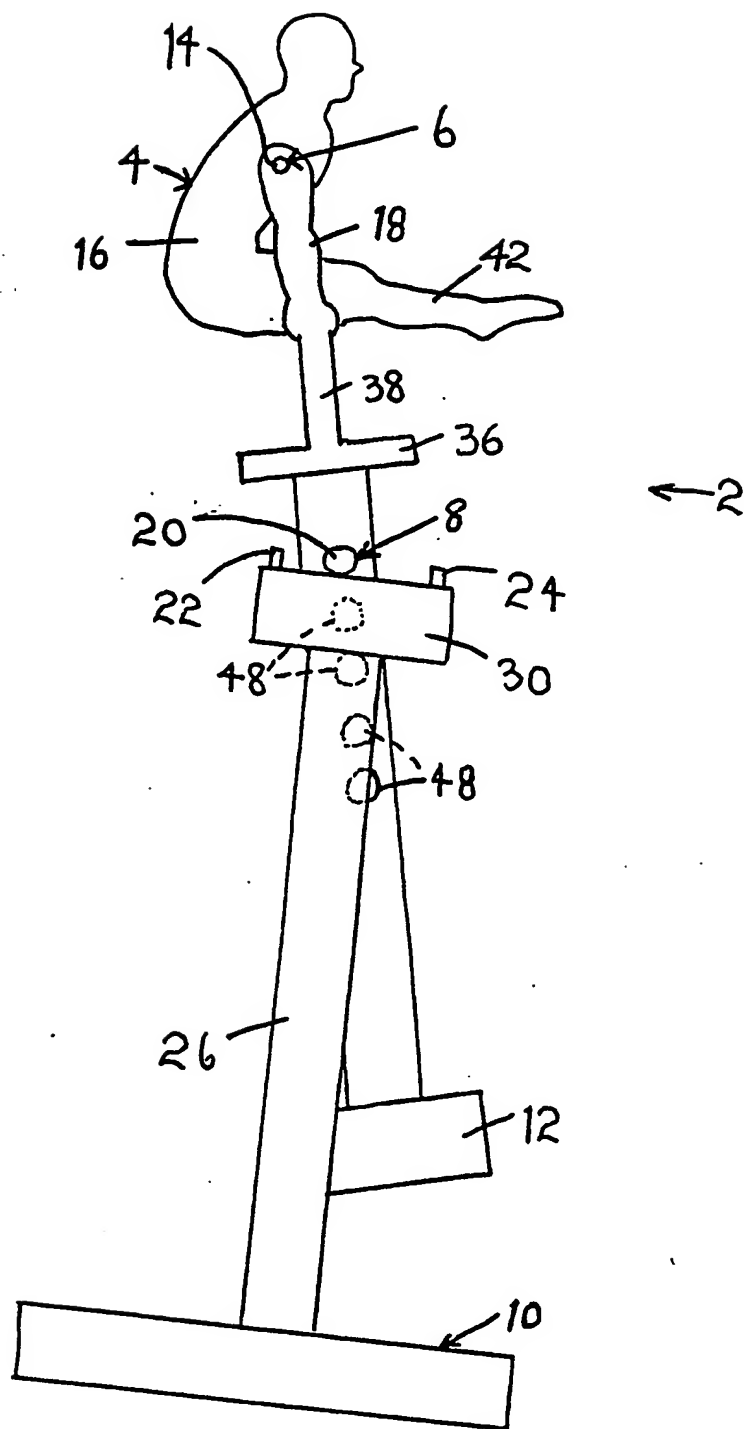


FIG 1

2/2

2213072

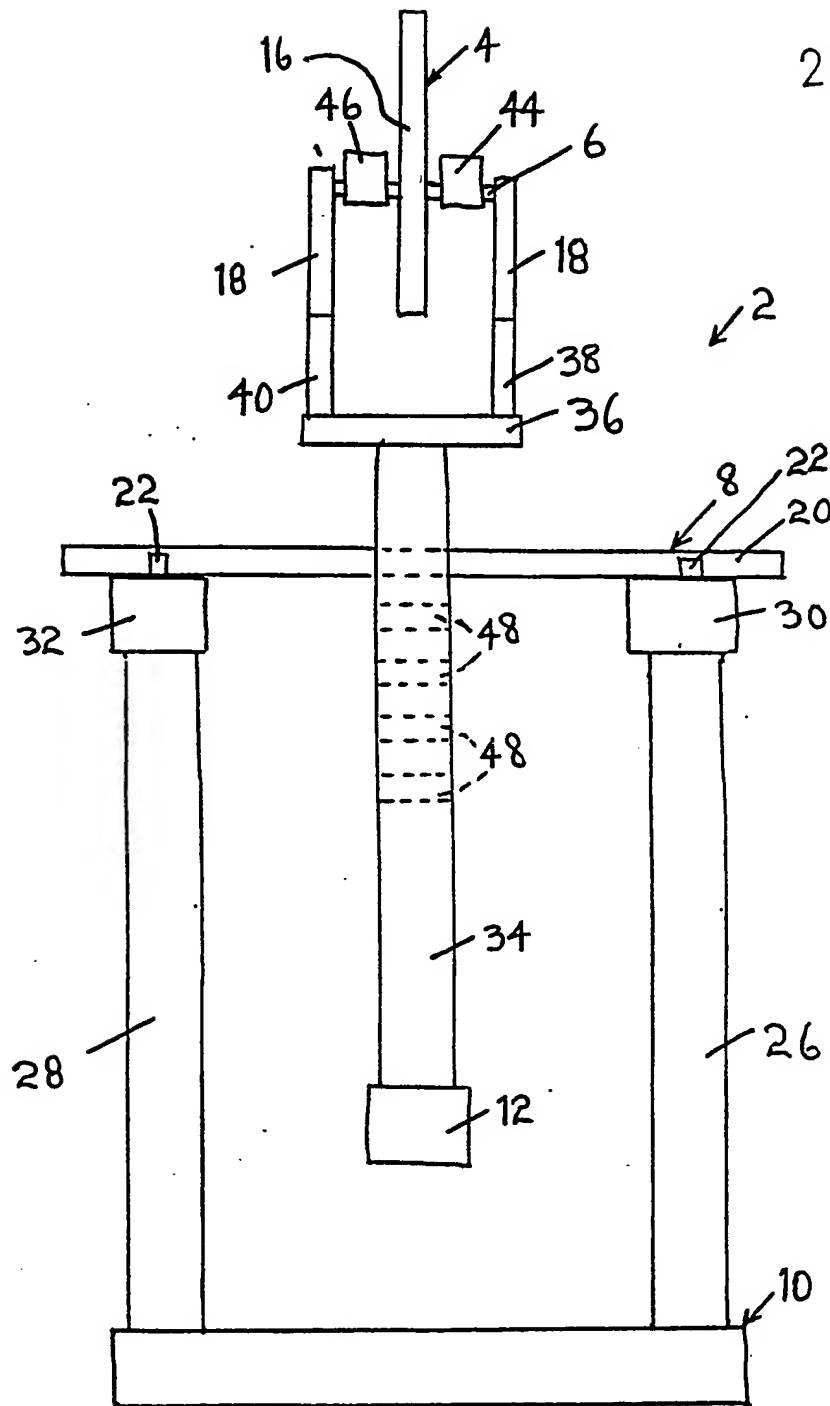


FIG 2

TOY APPARATUS

2213072.

This invention relates to toy apparatus.

There are various types of known toy apparatus in which a toy figure pivots about a pivot arrangement. In the known toy apparatus, only one type of pivoting
5 action takes place and it is an aim of the invention to provide improved toy apparatus in which two types of pivoting action can take place simultaneously.

Accordingly, this invention provides toy apparatus comprising at least one toy figure, a first pivot
10 arrangement about which the toy figure pivots during operation of the toy apparatus, a second pivot arrangement about which the toy figure and the first pivot arrangement pivot during operation of the toy apparatus, a stand, and counterweight means provided on a side of the second pivot
15 arrangement which is remote from the toy figure, and the toy figure and the counterweight means being so balanced in the toy apparatus that a push on the toy apparatus causes the toy apparatus to operate under gravity such that there is prolonged movement of the toy figure and the
20 first pivot arrangement about the second pivot arrangement, and prolonged movement of the toy figure about the first pivot arrangement.

With the toy apparatus of the present invention, the first and the second pivot arrangements allow two pivoting actions to take place simultaneously. Firstly there is the movement of the entire toy figure and the first pivot arrangement about the second pivot arrangement. This gives an overall large movement effect. Secondly, there is the movement of the toy figure about the first pivot arrangement. This enables the toy figure to effect specific actions such for example as acrobatics whilst in itself moving due to the movement of the entire figure about the second pivot arrangement. Thus the toy apparatus affords a combination of movements which is intriguing to both children and adults.

Preferably, the first pivot arrangement comprises a rod which connects a body part of the toy figure to a pair of limbs, whereby the body part of the toy figure is pivotable through the limbs. Preferably the limbs are arms, but they may be other limbs, depending upon the type of toy figure. Also, if desired, the first pivot arrangement may be a pivot which enables a body part of the figure to pivot about one single limb.

Advantageously, the toy figure is a clown, a gymnast, or an animal. Other types of toy figures however may be employed including objects such for example as aeroplanes.

The second pivot arrangement may be a rod supported on the stand.

5 The rod may be supported at each of its ends between a pair of abutment members on the stand. The rod may just rest on the stand between the pairs of the abutment members so that it is possible to separate the rod from the stand simply by lifting the rod away from the stand.

10 The stand may have a pair of upstanding support legs through which the counterweight is movable. Generally, the stand may be of any desired and appropriate construction and it may, if desired, have only one upstanding support leg.

15 Preferably, the counterweight means is adjustable in position. Adjustment of the counterweight means can then be effected to cause different types of pivoting action during operation of the toy apparatus.

20 The counterweight means may be supported on a support member which extends from the side of the second pivot arrangement which is remote from the toy figure.

The support member may also extend from the other side of the second pivot arrangement such that it supports the first pivot arrangement.

25 Preferably, the support member is a bar. Other types of support member may however be employed.

Advantageously, the second pivot arrangement is adjustable in position. Adjustment of the second pivot arrangement may then be effective to give different types of pivoting action during operation of the toy apparatus. Although the toy apparatus may be produced such that there is no adjustment of the counterweight means and/or the second pivot arrangement, the toy apparatus is preferably produced to be such that both the counterweight means and the second pivot arrangement are adjustable since this affords a large variation on the types of pivotal movement that may be obtained from the toy apparatus during operation of the toy apparatus.

The second pivot arrangement may be adjustable by being locateable in one of a series of apertures in the support member.

If desired, the toy apparatus may include at least one auxiliary toy figure positioned on the counterweight means side of the second pivot arrangement. The use of one or more auxiliary toy figures may be effective to give the toy apparatus a more complex appearance.

An embodiment of the invention will now be described solely by way of example and with reference to the accompanying drawings in which:

Figure 1 is a side view of the toy apparatus; and

Figure 2 is a rear view of the toy apparatus as shown in Figure 1.

Referring to the drawings, there is shown toy apparatus 2 comprising a toy figure 4. The toy apparatus 2 also comprises a first pivot arrangement 6 about which the toy figure 4 pivots during operation of the toy apparatus 2. Also provided in the toy apparatus 2 is a second pivot arrangement 8 about which the toy figure 4 and the first pivot arrangement 6 pivot during operation of the toy apparatus 2.

The toy apparatus 2 has a stand 10 and counterweight means 12. The counterweight means 12 is provided on a side of the second pivot arrangement 8 which is remote from the toy figure 4 as shown. The toy figure 4 and the counterweight means are so balanced in the toy apparatus 2 that a push on the toy apparatus 2 causes the toy apparatus 2 to operate under gravity such that there is prolonged movement of the toy figure 4 and the first pivot arrangement 6 about the second pivot arrangement 8, and prolonged movement of the toy figure 4 about the first pivot arrangement 6.

The first pivot arrangement 6 comprises a rod 14 which connects a body part 16 of the toy figure 4 to a pair of arms 18, whereby the body part 16 is pivotable through the arms 18.

The second pivot arrangement 8 comprises a rod 20 which is supported on the stand 10. More specifically, the rod 20 is supported at each of its ends between a pair of abutment members 22,24 on the stand 10. The stand 10 has a pair of upstanding support legs 26,28 and the abutment members 22,24 upstand from end parts 30,32 on the support legs 26,28 respectively. The rod 20 can be removed from its position between the abutment members 22,24 simply by lifting the rod 20 away from the stand 10. As can be seen most clearly from Figure 2, the counterweight means 12 is movable through the support legs 26,28.

The counterweight means 12 is supported on a support member 34 which extends from the side of the second pivot arrangement 8 which is remote from the toy figure 4. The support member 34 also extends from the other side of the second pivot arrangement 8 as shown such that it supports the first pivot arrangement 6. More specifically, the support member 34 is provided with a platform 36 and a pair of members 38,40 which upstand from the platform 36 and which extend into the arms 18, as can be seen most clearly from Figure 2. During pivoting of the toy figure 4 about the first pivot arrangement 6, it will be seen that the legs 42 of the toy figure 4 are able to swing through the arms 18 and the members 38,40. The toy figure 4 is maintained in a

central position on the rod 14 by spacer members 44,46.

The second pivot arrangement 8 is adjustable in position. More specifically, the rod 20 can be located in any desired one of a plurality of apertures 48 in the support member 34. By choosing different apertures 48, the pivoting actions from the toy apparatus 2 can be varied from, for example, simple reciprocating movements to continuous circles.

It is to be appreciated that the embodiment of the invention described above with reference to the accompanying drawings has been given by way of example only and that modifications may be effected. Thus, for example the counterweight means 12 may be arranged to be adjustable along the length of the support member 34. The counterweight means 12 may be provided with a screw threaded hole into which a screw threaded end of the support member 34 fits. Thus the counterweight means 12 may be adjustable by screwing along the support member 34. Alternatively, the support member can be secured by means of pegs fitting in holes at desired positions along the length of the support member 34. Although the counterweight means 12 has been shown in the drawings as a simple block, it may have other shapes as may be desired. The toy figure 4 which is shown in Figure 1 as an acrobat may be any other desired type of figure such for example as a clown or a

gymnast, or it may be an animal or an object. If desired, auxiliary toy figures may be provided along the support member 34 to make the entire toy apparatus 2 more complex. When one or more auxiliary toy figures are employed, then
5 the weight and position of the counterweight means 12 will be suitably adjusted. Generally, with appropriate positioning of the rod 20 and/or the counterweight means 12, the toy apparatus 2 can give long periods of pivotal movement about the first and the second pivot arrangements
10 6,8 from a single push. The toy apparatus 2 can be pushed at any convenient position such for example by pushing on the counterweight means 12 or the toy figure 4. Also, the stand 10 may be of a different design than has been shown.

CLAIMS

1. Toy apparatus comprising at least one
toy figure, a first pivot arrangement
about which the toy figure pivots during
operation of the toy apparatus, a second pivot arrangement
5 about which the toy figure and the first pivot arrangement
pivot during operation of the toy apparatus, a stand, and
counterweight means provided on a side of the second pivot
arrangement which is remote from the toy figure, and the
toy figure and the counterweight means being so balanced
10 in the toy apparatus that a push on the toy apparatus
causes the toy apparatus to operate under gravity such
that there is prolonged movement of the toy figure and the
first pivot arrangement about the second pivot arrangement,
and prolonged movement of the toy figure about the first
15 pivot arrangement.

2. Toy apparatus according to claim 1 in which the
first pivot arrangement comprises a rod which connects
a body part of the toy figure to a pair of limbs, whereby
the body part of the toy figure is pivotable through the
20 limbs.

3. Toy apparatus according to claim 1 or claim 2
in which the limbs are arms.

4. Toy apparatus according to any one of the
preceding claims in which the toy figure is a clown, a
5 gymnast, an animal or an object.

5. Toy apparatus according to any one of the
preceding claims in which the second pivot arrangement
is a rod supported on the stand.

6. Toy apparatus according to claim 5 in which the
10 rod is supported at each of its ends between a pair of
abutment members on the stand.

7. Toy apparatus according to claim 6 in which the
rod just rests on the stand between the pairs of the
abutment members so that it is possible to separate the
15 rod from the stand simply by lifting the rod away from
the stand.

8. Toy apparatus according to any one of claims 5
to 7 in which the stand has a pair of upstanding support
legs through which the counterweight means is movable.

9. Toy apparatus according to any one of the preceding claims in which the counterweight means is adjustable in position.

5 10. Toy apparatus according to any one of the preceding claims in which the counterweight means is supported on a support member which extends from the side of the second pivot arrangement which is remote from the toy figure.

10 11. Toy apparatus according to claim 10 in which the support member also extends from the other side of the second pivot arrangement such that it supports the first pivot arrangement.

12. Toy apparatus according to claim 10 or claim 11 in which the support member is a bar.

15 13. Toy apparatus according to any one of the preceding claims in which the second pivot arrangement is adjustable in position.

14. Toy apparatus according to claim 13 in which the second pivot arrangement is adjustable by being locateable

in one of a series of apertures in the support member.

15. Toy apparatus according to any one of the preceding claims and including at least one auxiliary toy figure positioned on the counterweight means side of the second pivot arrangement.

5

16. Toy apparatus substantially as herein described with reference to the accompanying drawings.